

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

H5SO  
Revision 2  
International  
Helicopters, Inc.  
UH-1B  
Revised January 24, 2005

TYPE CERTIFICATE DATA SHEET NO. H5SO

This data sheet which is part of Type Certificate No. H5SO prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

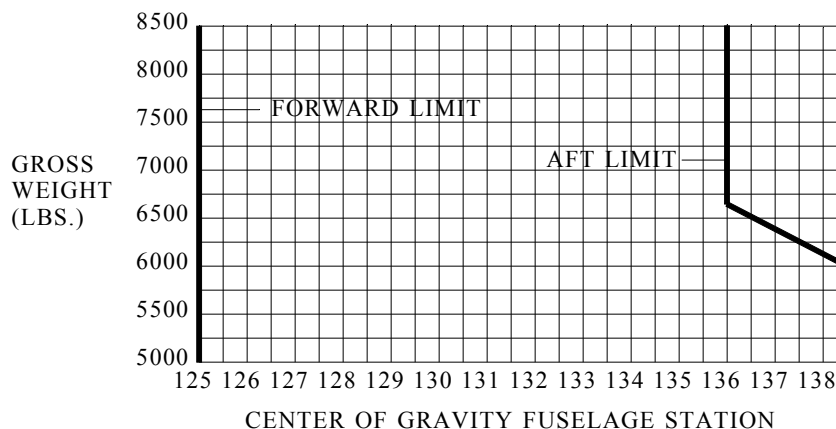
Type Certificate Holder: **This Type Certificate (TC) has been designated as ABANDONED** (See Note 9)

Type Certificate Holder Record: INTERNATIONAL HELICOPTERS, INC.  
2900 14th Street  
North Naples, Florida 33940

**I. Model UH-1B (Utility Helicopter Restricted Category) approved June 6, 1984**

Engine	Lycoming T-53-L-11 series												
Fuel	MIL-T-5624, Grade JP-4; alternate fuel MIL-T-5624 Grade JP-5. See TM 55-1520-219-10 for substitute and emergency fuels.												
	<table><thead><tr><th>Engine Limits (See Notes 6, 7, &amp; 8)</th><th>Torque pressure (p.s.i.)</th><th>Output Shaft (r.p.m.)</th><th>Exhaust Gas Temp. (°C.)</th></tr></thead><tbody><tr><td>Take off (5 Min.)</td><td>47.5 (1100 hp)</td><td>6600</td><td>610</td></tr><tr><td>Max. Cont.</td><td>39.0 (900 hp)</td><td>6400</td><td>590</td></tr></tbody></table>	Engine Limits (See Notes 6, 7, & 8)	Torque pressure (p.s.i.)	Output Shaft (r.p.m.)	Exhaust Gas Temp. (°C.)	Take off (5 Min.)	47.5 (1100 hp)	6600	610	Max. Cont.	39.0 (900 hp)	6400	590
Engine Limits (See Notes 6, 7, & 8)	Torque pressure (p.s.i.)	Output Shaft (r.p.m.)	Exhaust Gas Temp. (°C.)										
Take off (5 Min.)	47.5 (1100 hp)	6600	610										
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Rotor Limits	<table><tbody><tr><td><u>Power off</u></td><td><u>Power on</u></td></tr><tr><td>Max. 339 r.p.m.</td><td>Max. 324 r.p.m.</td></tr><tr><td>Min. 295 r.p.m.</td><td>Min. 294 r.p.m.</td></tr><tr><td colspan="2">Continuous Operation 294-324 r.p.m.</td></tr></tbody></table>	<u>Power off</u>	<u>Power on</u>	Max. 339 r.p.m.	Max. 324 r.p.m.	Min. 295 r.p.m.	Min. 294 r.p.m.	Continuous Operation 294-324 r.p.m.					
<u>Power off</u>	<u>Power on</u>												
Max. 339 r.p.m.	Max. 324 r.p.m.												
Min. 295 r.p.m.	Min. 294 r.p.m.												
Continuous Operation 294-324 r.p.m.													
Airspeed Limits	Never exceed 120 knots (138 m.p.h.) up to and including 6600 lbs. G.W. sea level to 2,000 ft. Never exceed 112 knots (129 m.p.h.) at 7200 lbs. G.W. sea level to 2,000 ft. (See note 2 for specific operation airspeed limits)												
C.G. Range	Longitudinal C.G. Limits  (+125.0) to (+136.0) to 6600 lbs. and above (+125.0) to (+136.4) at 6500 lbs. (+125.0) to (+137.3) at 6250 lbs. (+125.0) to (+138.0) at 6000 lbs. or less												

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Maximum Weight	8500 lbs.
Minimum Crew	1 (pilot)
Maximum Baggage	200 lbs. (150 lbs./sq. ft. deck loading max.)
Fuel Capacity	168 U.S. gals. (+136) if crashworthy fuel system not installed. 163 U.S. gals. (+136) if crashworthy fuel system is installed.
Oil Capacity	3.25 gal. (+157)
Rotor Blade and Control Movements	For rigging information, refer to Technical Manual 55-1520-219-20.
Serial Nos. Eligible	All U.S. Army serial numbers.

#### Data Pertinent to all Models

Leveling Means	Plumb line from top of left main door frame.
Certification Basis	FAR 21.25(a)(2) effective February 1, 1965. Type Certificate No. H5SO issued June 6, 1984, for the purpose of: <ul style="list-style-type: none"> <li>(1) Forest and Wildlife Conservation.</li> <li>(2) Aerial Surveying.</li> <li>(3) Patrolling.</li> <li>(4) External Cargo Operations (See Equipment List Item (3)).</li> <li>(5) Agricultural (spraying, dusting, seeding and livestock and predatory animal control) See Equipment List Item (2).</li> </ul>
Production Basis	None. No helicopter may be produced under this approval.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in each helicopter for certification. In addition, the following is required. <ul style="list-style-type: none"> <li>(1) U.S. Army TM55-1520-219-10, Operator's Manual UH-1B.</li> <li>(2) International Helicopters, Inc. Report IHI 201, dated 5/10/84, with attached IHI Drawing #1 is required for agricultural external load operation. Refer to Note 2 for operating limitations.</li> </ul>

- (3) Standard U.S. Army cargo suspension installation 204-070-949-5; 204-070-529-1; 204-070-529-3; or 204-070-529-7 IAW TM 55-1520-210-23P (Parts Manual) installed and maintained IAW TM 55-1520-219-20; and operated IAW TM 55-1520-219-10 (Operators Manual) for all external cargo operations. Refer to Note 2 for operation limitations.

Note 1 Current weight and balance report including list of equipment included in certificated empty weight and loading instructions must be in each helicopter at time of original airworthiness certification and at all time thereafter.

Note 2 The following placards must be prominently displayed in cockpit in full view of the pilot (On instrument panel).

(a) OPERATING LIMITS

DENSITY ALTITUDE RPM	CALIBRATED AIR SPEED - KNOTS							
	6600 LBS. OR LESS		7200 LBS.		8000 LBS.		8500 LBS.	
	6400	6600	6400	6600	6400	6600	6400	6600
SEA LEVEL TO								
2000 FT.	120	120	109	112	95	101	86	95
3000 FT.	116	116	105	108	92	97	82	92
6000 FT.	102	106	92	97	77	86	68	80
9000 FT.	90	94	78	86	65	76	--	--
12000 FT.	77	84	66	75	--	--	--	--
15000 FT.	64	72	--	--	--	--	--	--
18000 FT.	51	61	--	--	--	--	--	--

From 0 to 70 knots use 6000 to 6600 RPM range

From 70 to 120 knots use 6400 to 6600 RPM range

Reduce air speed when vibration is excessive

External Load Operation: VNE 60 knots CAS unless further restricted by operating limits charts above

- (b) This helicopter must be operated in accordance with the restricted category limitations of FAR 91.39 and with the limitations noted in U.S. Army TM 55-1520-219-10.
- (c) Standard U.S. Army Cargo Suspension Installation 204-070-529-5; 204-070-529-1; 204-070-529-3; or 204-070-529-7 IAW TM 55-1520-210-23P (Parts Manual) installed and maintained IAW TM 55-1520-219-20; and operated IAW TM 55-1520-219-10 (Operators Manual).

Note 3 Prior to civil airworthiness certification the following must be accomplished.

- (a) International Helicopters, Inc. Report IHI 101, dated 5/7/84, must be complied with.
- (b) If necessary for the purpose of weight and balance, relocation of battery to station (+5.5) should be accomplished in accordance with International Helicopters, Inc. Report IHI 301, dated 5/7/84.
- (c) FAA Airworthiness Directives for all Bell 204 (UH-1B) series aircraft and Lycoming engines T53-L-11 series must be reviewed for applicability and complied with accordingly.

NOTE 4 This model helicopter must be serviced and maintained in compliance with TM 55-1520-219-10 and TM 55-1520-219-20. Repairs to be made in accordance with TM 55-1520-35. Component overhaul intervals and replacement time shall be in accordance with TBO/Replacement schedule found in TM 55-1520-219-20, unless superseded by appropriate Airworthiness Directives.

NOTE 5 Component life limits to be per U.S. Army TM 55-1520-219-20.

- NOTE 6 Torque pressure output by engine torque sensing system varies with individual engines. A calibration of this value is required on each engine and the value corresponding to take-off power is stamped on the engine data plate.
- NOTE 7 Gas producer speed as shown under "Engine Limits" are maximum permissible speeds. The gas producer speed for rated power output varies with individual engines and must be determined during engine calibration and stamped on the engine data plate. The rated gas producer speed shown on the instrument panel must correspond to the engine data plate gas producer speed. Gas producer speed limits also vary with OAT in accordance with the schedule as shown in the temperature in Limit (Go-No-Go Take-Off) placard on the instrument panel.
- NOTE 8 Maximum permissible exhaust gas temperature varies with ambient temperature as described in the Operation's Manual. Check engine EGT by use of Health Indicator Test (HIT) prior to take-off. (See TM 55-1520-219-10 and HIT EGT Log for aircraft)
- NOTE 9 **This Type Certificate (TC) has been designated "ABANDONED".** A "Notice of Intent To Designate as Abandoned Certain Type Certificates Issued in the Restricted Category," was published by the Federal Aviation Administration (FAA) in the Federal Register on August 8, 2003 (68 FR 47379). That Notice listed this TC. The FAA received no comments on the published Notice. The FAA has been unable to contact this TC holder. Hence, the FAA has determined that this TC holder is not complying with its Continued Operational Safety (COS) responsibilities. Therefore, no additional aircraft will be added to this TC and no additional original airworthiness certificates will be issued based on this TC. The effectiveness of this TC is limited to those aircraft that received original airworthiness certification prior to the incorporation of this note (Date of Incorporation, January 24, 2005). Subsequently, if the TC holder is located and assumes their COS responsibilities, the restriction(s) imposed by this note may be lifted.

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